

Local Safety Successes Panel Discussion

Adam Ball – Saginaw CRC
Larry Hummel – Van Buren CRC
Wayne Schoonover – Ionia CRC
William Mainz – Lapeer CRC

Facilitator: Dale Lighthizer – MDOT

Michigan Traffic Safety Summit March 11-13

-Engineering Workshop-
Local Safety Initiative Program Success Stories

-Center Road Safety Project-
Saginaw County Road Commission
Adam R. Ball, P.E. - Director of Engineering

CENTER ROAD SAFETY PROJECT



Project Overview

- Project Location
- Accident History
- Traffic Congestion
- Existing Roadway Geometry
- Proposed Roadway Geometry
- Traffic Signal Considerations
- Construction Schedule
- Cost / Funding
- MDOT Coordination

CENTER ROAD SAFETY PROJECT

Standard Crash Report - Milepoints

Milepoint	US 10 #	US 10 City/Township	Location	US 10 Crossroad Reference	Crash Type	Crash Severity	Date	Hour of Occurrence	Number of			Weekday	Environmental Condition			Relationship
									Vehicle	Occupant	Inj.		Weather	Lighting	Surface	
5.702	3270426	Saginaw Twp.	25 S	FRONTIER	Rear End Straight	PDO	4/4/2004	04PM-05PM	2	3	0	Thursday	Cloudy	Daylight	Dry	On Road
5.704	6980303	Saginaw Twp.	0 X	FRONTIER	Side-Swipe Opposite	PDO	1/23/2005	03PM-04PM	2	3	0	Sunday	Clear	Daylight	Slushy	On Road
5.743	4194059	Saginaw Twp.	207S N	SHATTUCK	Other Object	PDO	1/4/2004	09PM-09PM	1	1	0	Tuesday	Snow	Dark,Lighted	Uncoated	Uncoated
5.761	6980474	Saginaw Twp.	302 S	FRONTIER	Rear End Straight	PDO	9/5/2004	11AM-NOON	3	3	0	Wednesday	Cloudy	Daylight	Dry	On Road
5.861	7656454	Saginaw Twp.	750 S	MCCARTY	Rear End Drive	PDO	4/15/2005	04PM-05PM	2	2	0	Friday	Clear	Daylight	Dry	On Road
5.945	6980722	Saginaw Twp.	202 S	MCCARTY	Rear End Straight	PDO	3/23/2004	04AM-05AM	2	3	0	Sunday	Cloudy	Daylight	Dry	On Road
5.964	8146311	Saginaw Twp.	102 S	MCCARTY	Backing	PDO	12/6/2003	01AM-02AM	2	1	0	Friday	Snow	Dark,Lighted	Wet	On Road
5.974	8237123	Saginaw Twp.	80 S	MCCARTY	Rear End Straight	PDO	12/14/2005	03PM-04PM	3	8	0	Wednesday	Cloudy	Daylight	Wet	On Road
5.975	4321187	Saginaw Twp.	42 S	MCCARTY	Rear End Straight	PDO	9/17/2003	07AM-08AM	2	2	0	Wednesday	Uncoated	Daylight	Dry	On Road
5.979	6980305	Saginaw Twp.	20 S	MCCARTY	Rear End Straight	PDO	7/29/2004	01PM-02PM	2	2	0	Wednesday	Clear	Daylight	Dry	On Road
5.980	4321196	Saginaw Twp.	15 SW	MCCARTY	Angle Straight	Injury	9/17/2003	07AM-08AM	2	3	1	Wednesday	Clear	Daylight	Dry	On Road
5.981	8146325	Saginaw Twp.	10 S	MCCARTY	Rear End Straight	PDO	11/6/2003	04PM-05PM	2	2	0	Wednesday	Cloudy	Daylight	Dry	On Road
5.981	8237143	Saginaw Twp.	10 S	MCCARTY	Angle Straight	PDO	5/20/04	11AM-NOON	2	2	0	Monday	Cloudy	Daylight	Dry	On Road
5.982	6980608	Saginaw Twp.	8 S	MCCARTY	Head-On Left Turn	PDO	8/23/2004	NOON-01PM	2	3	0	Sunday	Cloudy	Daylight	Dry	On Road
5.983	1532051	Saginaw Twp.	10 S	MCCARTY	Rear End Straight	PDO	10/26/2001	09PM-09PM	2	2	0	Friday	Snow	Dark,Lighted	Wet	On Road
5.983	1228888	Saginaw Twp.	20 S	MCCARTY	Rear End Straight	PDO	3/11/2001	09PM-09PM	2	1	0	Sunday	Clear	Daylight	Dry	On Road
5.983	2057124	Saginaw Twp.	0 X	MCCARTY	Angle Straight	Injury	2/6/2002	09PM-09PM	2	2	1	Wednesday	Clear	Daylight	Dry	On Road
5.983	4321021	Saginaw Twp.	15 SW	MCCARTY	Angle Straight	PDO	10/6/2003	11AM-NOON	2	2	0	Wednesday	Clear	Daylight	Dry	On Road
5.983	8146821	Saginaw Twp.	30 S	MCCARTY	Angle Turn	PDO	12/4/2003	04AM-05AM	2	2	0	Wednesday	Snow	Daylight	Slushy	On Road
5.983	698175	Saginaw Twp.	10 S	MCCARTY	Angle Turn	PDO	8/5/2004	NOON-01PM	2	2	0	Friday	Clear	Daylight	Dry	On Road
5.983	8236813	Saginaw Twp.	10 S	MCCARTY	Angle Turn	PDO	9/12/05	07AM-08AM	2	2	0	Monday	Cloudy	Dark,Lighted	Wet	On Road
5.983	8237053	Saginaw Twp.	12 S	MCCARTY	Angle Straight	PDO	10/21/2005	05AM-07AM	2	2	0	Monday	Cloudy	Dark,Lighted	Wet	On Road

Total crashes for PR 0478007: 126

Total Fatal Crashes: 0 Total Injury Crashes: 24 Total PDO Crashes: 102

5 Year Accident History

Injury - 24
PDO - 102
Fatal - 1

Rear End Collissions(58)

004	NOON-01PM	2	2	0	Friday	Clear	Daylight	Dry	On Road
005	07AM-08AM	2	2	0	Thursday	Clear	Daylight	Dry	On Road
2005	06AM-07AM	2	2	0	Monday	Cloudy	Dark,Lighted	Wet	On Road

Total Fatal Crashes: 0 Total Injury Crashes: 24 Total PDO Crashes: 102

CENTER ROAD SAFETY PROJECT

Traffic Congestion

Center Road ADT = 17,585
Center Road AM Peak Hour = 2,874
High School Driveway AM Peak Hour = 823
LOS = F (Northbound)



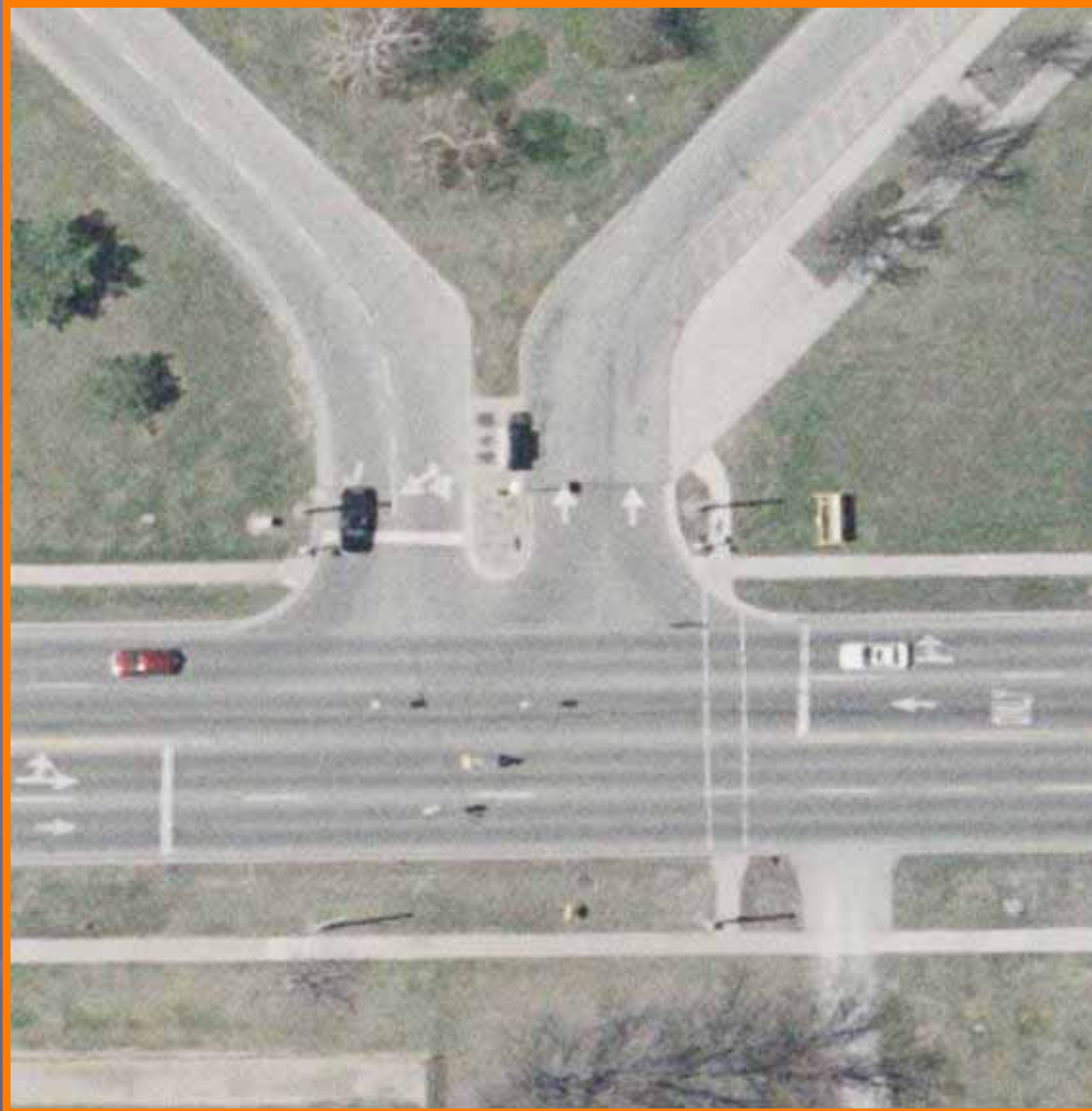
CENTER ROAD SAFETY PROJECT

Traffic Congestion

Center Road ADT = 17,585
Center Road PM Peak Hour = 2,667
High School Driveway PM Peak Hour = 488
LOS = F (Eastbound)



CENTER ROAD SAFETY PROJECT



Existing Roadway Geometry

- Center Road - 4 Lanes
(No Turn Lane)
- School Driveway – 2 Inbound
and 2 Outbound
- 3 Phase Signal
- Pedestrian Conflicts

CENTER ROAD SAFETY PROJECT



Proposed Roadway Geometry

- Traffic Study
- Funding Limits
- Budgetary Constraints
- School Bond Issue

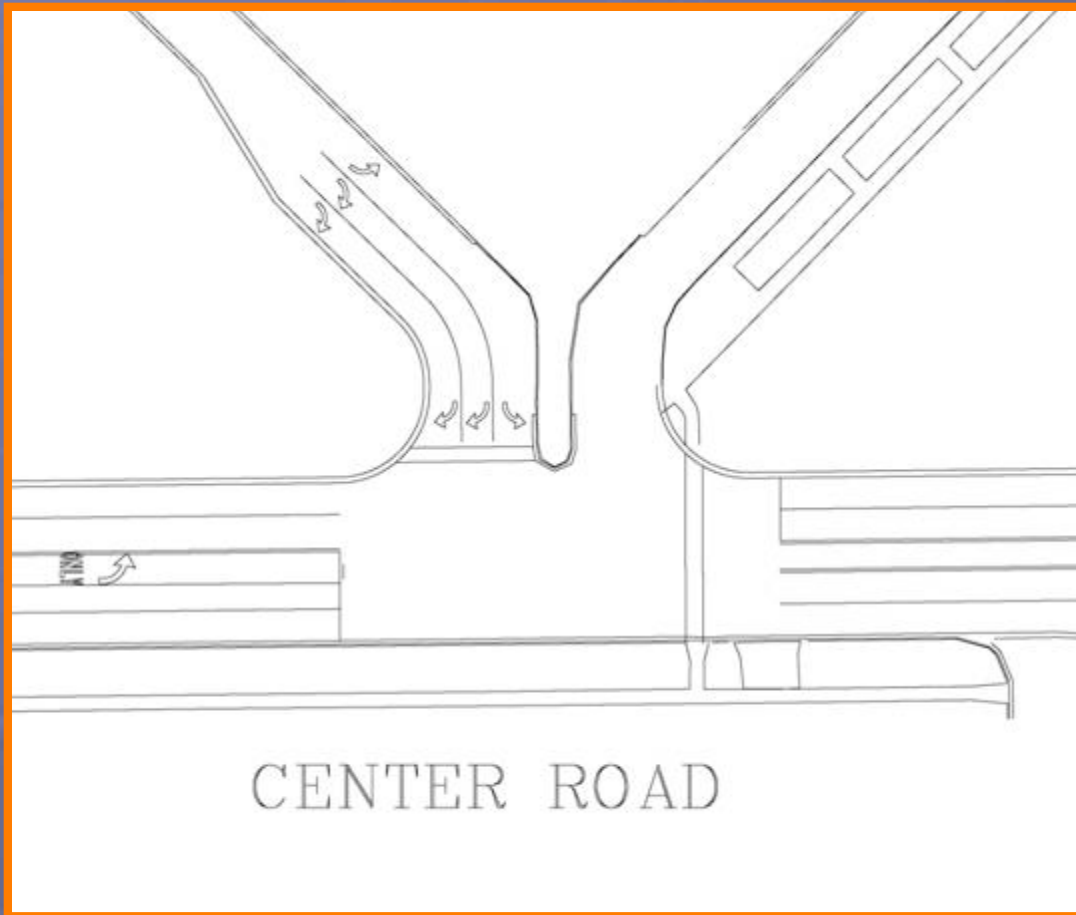
CENTER ROAD SAFETY PROJECT



Proposed Roadway Geometry

- Traffic Study
- Funding Limits
- Budgetary Constraints
- School Bond Issue

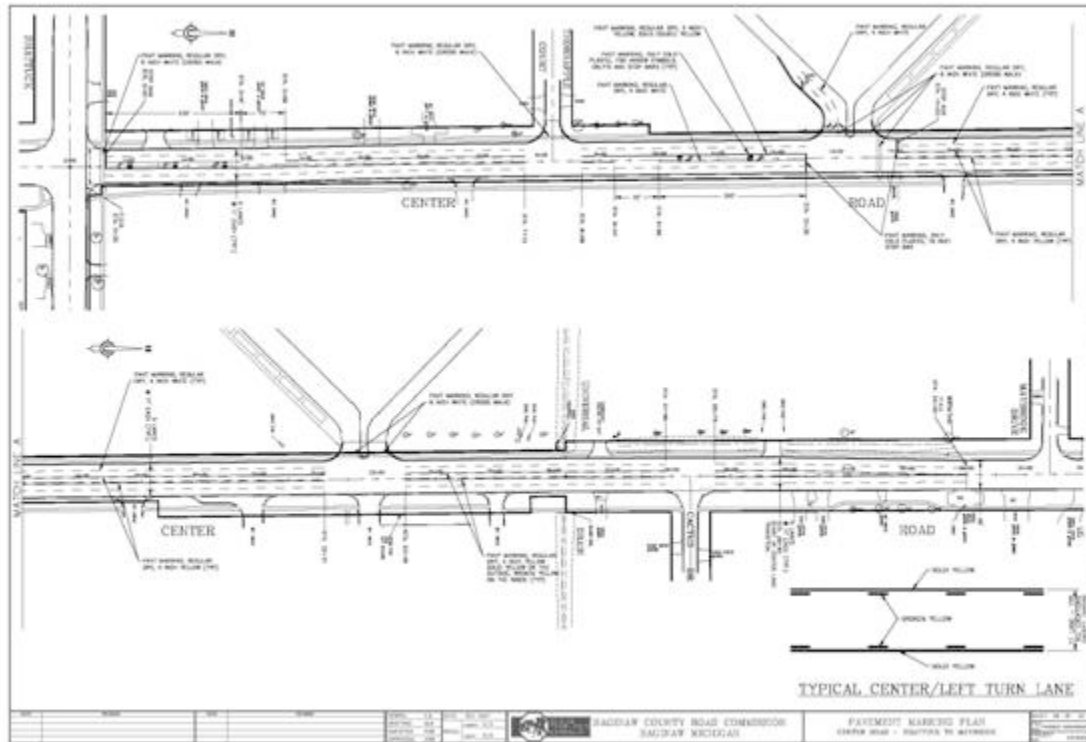
CENTER ROAD SAFETY PROJECT



Proposed Roadway Geometry

- Center Road - 5 Lanes
(Designated Left Turn
Lane)
- School Driveway – 2
Inbound and 3 Outbound
- 4 Phase Signal
- Isolated Pedestrian Phase

CENTER ROAD SAFETY PROJECT



Proposed Roadway Geometry

DESIGN CONSIDERATIONS

- Widening (Curb vs. Sidewalk)
- Project Limits – Touch Down
 - Utility Conflict Avoidance
 - Right-of-Way

CENTER ROAD SAFETY PROJECT



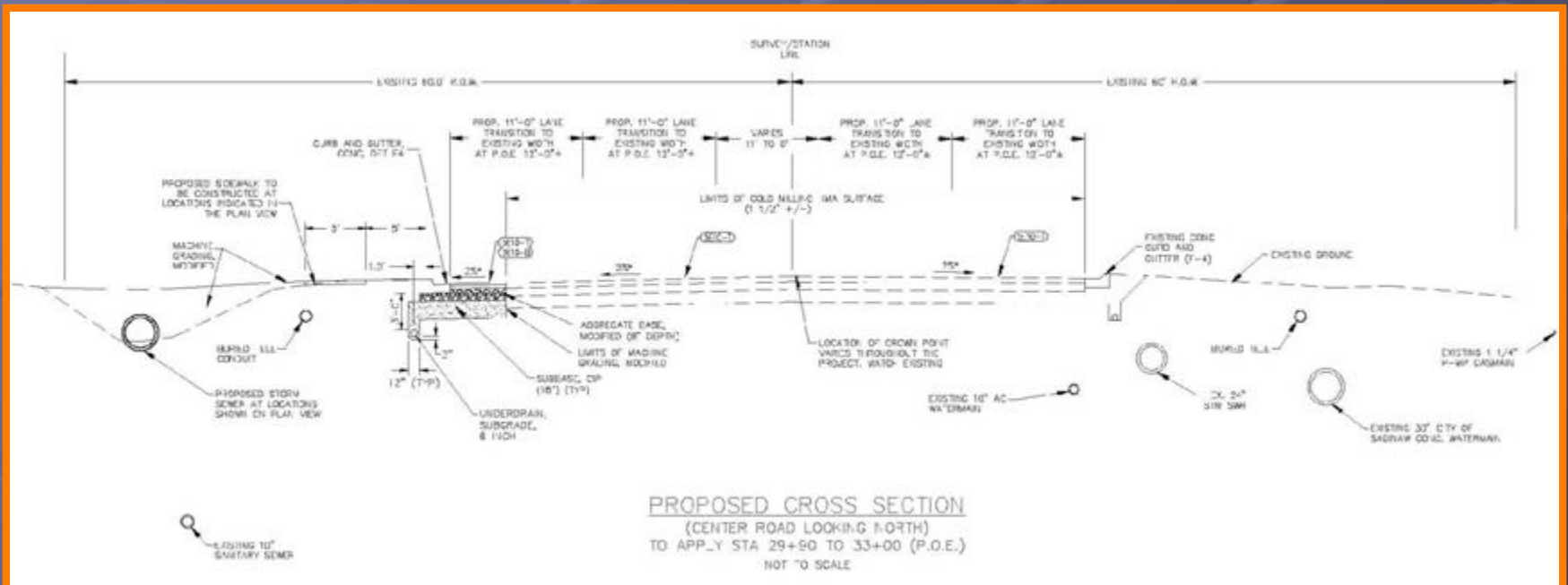
Traffic Signal Consideration

- Isolated Pedestrian Phase
- Flashing Yellow 4 Level Signal (1st in County)
- Driver Maturity
- Mitigation Measures

CENTER ROAD SAFETY PROJECT

Construction Schedule

- April 4th, 2008 Letting
- June 9th, 2008 Construction Start
- August 28th, 2008 Finish



CENTER ROAD SAFETY PROJECT



Project Cost / Funding

Safety \$400,000

STPU \$115,000

Local \$130,000

Total Cost +/- \$645,000

CENTER ROAD SAFETY PROJECT

MDOT Help / Coordination

Jim D'Lamater – MDOT Local Agency – Safety

Ola Williams – MDOT Planning

CENTER ROAD SAFETY PROJECT



THANK YOU

Rural Safety Improvements A Local Perspective



Overview

- The availability of High Risk Rural Roads Funding (HRRR) in addition to the traditional Federal Safety Funding has provided many agencies with a much needed avenue of project funding for some of the most worthy locations across the State of Michigan as well as across the country.
- Funding allows for the targeting of the nearly 60% of fatalities across the country that occur on the road network.



Features & Benefits

- Coordination with the State of Michigan Strategic Highway Safety Plan – in particular the intersection and roadway departure segments
- Local agency coordination of safety improvements with resurfacing and restoration projects in house and with adjacent townships and/or cities and villages
- Incorporation of the Road Safety Audit model or similar review during the preliminary stages of a project
- Ability to incorporate low cost safety solutions that potentially could lead to a dramatic reduction in crashes on our rural roadways



Applications

- Rural Intersection upgrades including geometrics, signage, pavement markings and overhead beacons



Good Practices: Support attainment of pavement preservation

- Institutional Practices
 - Those practices related to the capabilities, culture and priorities of an agency. Agencies do not necessarily have the ability to adopt these practices on their own
- Technical Practices
 - Those practices that tend to be matters that are wholly or substantially within the purview of transportation agencies



Institutional Practices

- Integrate Safety into Preservation Projects
- Establish Multi-fund Project Tracking
- Provide for Flexible Project Development Cycles
- Strengthen State-Local Relationships
- Develop an Expedient Procedure for Minor Right-of-Way Acquisition
- Engage Safety Experts in Project Development



Technical Practices

- Identify Targeted Safety Improvements
- Selectively Improve Geometry
- Install Traffic Control Devices and Guidance
- Improve Roadsides
- Improve Private and Public Access Points



Resources

- Michigan Department of Transportation – Local Agency Programs – James D’Lamater, P.E.
- Michigan Department of Transportation – Local Safety Initiative – Dale Lighthizer, P.E.
- Publications:
 - Innovative Intersection Safety Improvement Strategies and Management Practices: A Domestic Scan September 2006 - FHWA
 - Good Practices: Incorporating Safety into Resurfacing and Restoration Projects December 2006 - FHWA
 - FHWA Road Safety Audit Guidelines
FHWA-SA-06-06
 - Low Cost Local Road Safety Solutions
NACE and ATSSA 2006
 - State of Michigan Strategic Highway Safety Plan
GTSAC 2006



Welcome to Ionia County



Ionia County Rural, and growing...



Charlotte Hwy Bridge - 1989



Charlotte Hwy Bridge - 2001

Ionia County Road Commission

- Federal Aid Safety Projects
 - Guardrail upgrading / bridge attachment / placement
 - Guardrail removal - slope flattening
 - Intersection reconstruction – Y to T, Twp jog
 - Curve superelevation corrections
 - County drain set back



Ionia County Road Commission

- Federal Aid High Risk Rural Roads
 - Tree removals
 - Sign upgrading – additional signing and prismatic sheeting
 - Pavement Marking Improvements – Recessed Urethane



Ionia County Road Commission

- MDOT Local Safety Initiative
 - County-wide Safety Audit
 - *Coming soon – slope flattening / sign upgrade / tree removal*



Now for Something
Completely Different...



Why?

In 2006, traffic crashes killed 42,642 people in the United States – about 117 deaths per day, and nearly 5 every hour.





How?

Communication
&
Building Trust

Communication

- Listen First:
 - Engage the public.
 - Listen before you speak.
 - Seek to understand.
 - Don't presume you have all the answers – or all the questions.
- Communicate Early with the public and land owners.
 - Discuss specific crash patterns and types
 - Discuss proven engineering solutions.
 - Discuss the proposed solution, pro's and con's.
- Clarify Expectations:
 - Disclose and reveal expectations.
 - Don't assume that expectations are clear or shared.

Building Trust

- Talk Straight:
 - Be honest, let them know where you stand.
 - Use simple language, translate engineering lingo.
 - Don't distort the facts.
 - Don't leave a false impression.
- Create Transparency:
 - Tell the truth in a way that can be verified.
 - Be open and authentic.
 - Don't have hidden agendas.
 - Don't hide information.

Building Trust

- Demonstrate Respect:
 - Treat everyone with respect, especially those who can't do anything for you.
- Practice Accountability:
 - Hold yourself and others accountable.
 - Take responsibility for results.
 - Be clear on how you'll communicate how you're doing – and how others are doing.
 - Don't avoid or shirk responsibility.
 - Don't blame others when things go wrong.

Building Trust


- Keep Commitments:
 - Say what you're going to do.
 - Then do what you say you're going to do.
 - Make commitments carefully and keep them.
 - Don't attempt to "spin" your way out of a broken commitment.
- Right Wrongs:
 - Make things right when you're wrong.
 - Apologize quickly.
 - Make restitution where possible.
 - Demonstrate personal humility.
 - Don't let pride get in the way of doing the right thing.

Building Trust


- Deliver Results:
 - Get the right things done.
 - Don't over promise and under deliver.
 - Don't make excuses for not delivering.

This is a Journey ...

- Seek to learn about, understand, and exploit new funding sources.
- Approach every opportunity with “Cautious Enthusiasm”.
- Seek assistance from others - “It’s not what you know and what you have, it’s who you know and what they have.”
- And remember... Complacency is a killer.



William Mainz – Lapeer CRC



Panel Questions